

AMENDMENTS TO THE SPECIFICATION:

Please delete the original title, and substitute therefor the following new title:

-- NEOCULIN ACIDIC SUBUNIT, A TASTE-MODIFYING POLYPEPTIDE --.

Please delete the original Abstract, and substitute therefor the Substitute Abstract set forth in the enclosed Appendix.

Please delete the paragraph bridging pages 22 and 23 of Applicants' Substitute Specification submitted July 28, 2006 (that is, please delete the paragraph beginning on page 22, line 21, through page 23, line 4), and substitute therefor the following new paragraph:

-- Such DNA of the gene encoding the polypeptide NAS can be obtained for example by extracting mRNA from a fruit of Curculigo latifolia several weeks after pollination, synthetically preparing cDNA with reverse transcription · polymerase chain reaction (RT-PCR), and packaging the cDNA in a phage vector. Then, infection with the phage vector is carried out to obtain a cDNA library. Subsequently, a probe prepared on the basis of the amino acid sequence of the polypeptide NAS clarified in the invention is allowed to identify the intended DNA with a plaque hybridization, and ~~recover~~ the intended DNA is recovered. --

Please delete the paragraph bridging pages 24 and 25 of Applicants' Substitute Specification (that is, please delete the paragraph beginning on page 24, line 23, through page 25, line 4), and substitute therefor the following new paragraph:

-- Such DNA of the gene encoding the polypeptide PNAS can be obtained, for example, in the same manner as in the case of the mature polypeptide NAS from a fruit of Curculigo latifolia several weeks after pollination. Additionally, the DNA shown above in (A) or (B) may also be obtained by PCR using, as a primer, an oligonucleotide synthetically prepared on the basis of the nucleotide sequence of the nucleotides 4 to 477 in the nucleotide sequence shown in SEQ ID NO:1 in the sequence listing, or may be synthesized with various commercially available DNA synthesizers. --

Please delete the paragraph on page 41, lines 10-18 of Applicants' Substitute Specification, and substitute therefor the following new paragraph:

-- Specifically, the peptide was treated for the release of sialic acid; then, the sugar was converted to a reduced sugar, which was continuously hydrolyzed with an acid, to cleave all the glycoside bonds contained in the sugar chain of the glycoprotein, whereby releasing the sugars in the forms of monosaccharides. After the generated monosaccharides were labeled and then separated by HPLC using TSKgel ODS-80TsQA column (manufactured by TOSOH; a 4.6 mm diameter × 7.5 cm), detection was performed by 305 nm absorbance for analysis. --

Please delete the paragraph on page 59, lines 13-22 of Applicants' Substitute Specification, and substitute therefor the following new paragraph:

-- Then, wrapping with a parafilm and opening an air hole, the culture medium was incubated at 30°C for 3 to 5 days. The resulting colony was sub-cultured in the

M plate (0.2 % NH₄Cl, 0.1 % (NH₄)₂SO₄, 0.05 % KCl, 0.05 % NaCl, 0.1 % KH₂PO₄, 0.05 % MgSO₄ · 7H₂O, 0.002 % FeSO₄ · 7 H₂O, 2 % glucose, 1.5 % agar, pH 5.5) three times, to stabilize the character. 30 transformant strains per one plate were obtained.

(3) Screening for neoculin-generating strain

(a) Generation at small scale in DPYDYP culture broth (pH 8.0) and recovery of liquid culture -

Please delete the paragraph bridging pages 59 and 60 of Applicants' Substitute Specification (that is, please delete the paragraph beginning on page 59, line 23, through page 60, line 7), and substitute therefor the following new paragraph:

-- 12 transformant strains obtained in the transformant preparation described above in (2) were spread on an M plate, for incubation at 30°C for 2 to 4 days. Conidiospore was scratched and recovered with an autoclaved bamboo skewer, for culturing in a 100 ml flask charged with 20 ml of DPY culture broth, pH 8.0 (0.5 % KH₂PO₄ was replaced with 0.5 % KH₂PO₄ in the composition of the reagents in the DPY culture broth, pH 5.5, which was then adjusted to pH 8.0 using 1M NaOH) with shaking at 30°C and 200 rpm for 3 days. The cells were separated and recovered from the liquid culture with a Miracloth. --

Please delete the paragraph on page 66, lines 12-16 of Applicants' Substitute Specification, and substitute therefor the following new paragraph:

-- In accordance with the invention, still further, the DNA of the gene encoding the protein is provided, which enables to provide efficiently~~efficiently~~ the protein by selecting an appropriate host, particularly using the koji mold as the host, and with a use of genetic engineering technique. --